Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An electronic golf swing analyzer system, comprising:

a. an analyzer including an infrared sensor base and an ultrasonic ~~(U/S)~~ sensor base, said infrared sensor base includes a hitting area with a center axis with two arrays of infrared sensors located therein used to detect the presence of a golf club head moving through said hitting area, each said array of infrared sensors being located on opposite sides and equal distance from said center axis, said ultrasonic sensor base being perpendicularly aligned and extending upward above said infrared sensor base, said ultrasonic sensor base including at least two ultrasonic sensors aimed at said hitting area, said ultrasonic sensors being located on opposite sides and equal distance from said center axis, ~~said analyzing also including means for activating~~ said array of infrared sensors and said ultrasonic sensors being controlled so that when a golf club head moves across said hitting area on said infrared sensor base and parallel to said ultrasonic base, said array of infrared sensors located in front of said center axis being activated when said golf club head moves through said hitting area and which then sequentially activates said ultrasonic sensor on the same side of said center axis and said array of infrared sensors and said ultrasonic sensor located on the opposite side of said center axis; ~~actictivates on the same side of said center axis as said array of infrared sensors located on the same side of said center axis when a golf club across said infrared sensor base;~~

b. a computer having working memory;

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c. means for connecting said analyzer to said computer; and,

d. a golf swing analyzing software application loaded into said working memory of said computer, said software application ~~capable of using~~ uses the data from ~~said ultrasonic sensors and said~~ infrared sensors located before said center line axis when said golf club head moves through said hitting area to determine the club head's speed and face angle, said software application also uses the data from said two ultrasonic sensors as said travels through said hitting area to determine the swing path angle. ~~when a golf club swing is made over said hitting area to determine a golf ball's distance, direction, and flight path after impact~~.

2. (Cancelled)

3. (Currently Amended) The electronic golf swing analyzer system, as recited in Claim 1, wherein said ~~array~~ arrays of infrared sensors are symmetrical and include ~~includes~~ one outer infrared sensor and two inner infrared sensors.

4. (Cancelled)

5. (Cancelled)

6. (Currently Amended) The electronic golf swing analyzer system, as recited in Claim 3, wherein each said infrared sensor includes ~~include an~~ a pulsing infrared emitter and an infrared photodiode detector.

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7. (Original) The electronic golf swing analyzer system, as recited in Claim 6, wherein said infrared emitter and said infrared photodiode detector are located in a bushing fitted to said infrared support base.

8. (Currently Amended) The electronic golf swing analyzer system, as recited in Claim 7, further including an infrared filter located over said photodiode detector ~~photo-detector~~.

9. (Original) The electronic golf swing analyzer system, as recited in Claim 8, further including a lens mounted over said photodiode detector to direct infrared radiation towards said photo-detector.

10. (Original) The electronic golf swing analyzer system, as recited in Claim 1, further including a rubber mat attached over said infrared sensor base.

11. (Original) The electronic golf swing analyzer system, as recited in Claim1, wherein said means to connect said computer to said analyzer is a serial communications cable.

12. (Original) The electronic golf swing analyzer system, as recited in Claim 1, wherein said infrared support base and said ultrasonic support base are pivotally connected together along one edge thereby enabling said analyzer to be selectively opened and closed.

13. (Cancelled)

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14. (Original) The electronic golf swing analyzer system, as recited in Claim 1, wherein said ultrasonic sensors are automatically software activated at the proper time to produce ultrasonic signals when a golf club moves over said arrays of infrared sensors located on the same side of said center axis of said infrared support base, said ultrasonic sensors being aimed to transmit an ultrasonic signal and receive a reflected ultrasonic signal from a golf club moving over said array of infrared sensors located on the same side of said center axis.

15. (Currently Amended) An electronic golf swing analyzer system, comprising:

a. an analyzer including an infrared sensor base and an ultrasonic sensor base, said infrared sensor base includes a hitting area with a center axis with two arrays of infrared sensors located therein used to detect the presence of a club head moving through said hitting area, each said infrared sensor in each said array of pulsing infrared sensors includes an infrared emitter and an infrared photodiode detector ~~and being located inside a bushing~~ mounted on opposite sides and equal distance from said center axis, said ultrasonic sensor base being perpendicularly aligned and extending upward above said infrared sensor base, said ultrasonic sensor base including at least two ultrasonic sensors aimed at said hitting area, said ultrasonic sensors being located on opposite sides and equal distance from said center axis, ~~3~~ said ultrasonic sensors being ~~software~~ activated ~~at the proper time~~ to produce ultrasonic signals when a golf club moves over said ~~arrays~~ array of infrared sensors located on the same side of said center axis, said ultrasonic sensors being aimed to transmit an ultrasonic signal and receive a reflected ultrasonic signal from a golf club moving over said array of infrared sensors located on the same side of said center axis;

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b. a computer having working memory and a visual display means;

c. means for connecting said analyzer to said computer; and,

d. a golf swing analyzing software application loaded into said working memory of said computer, said software application ~~capable of using~~ uses the data from said ultrasonic sensors to calculate the swing path angle and uses the data from ~~and~~ said arrays of infrared sensors to determine the club head velocity and face angle at impact when a golf club is ~~swing~~ swung over said hitting area and impacts a golf ball located ~~is made~~ on said center axis. ~~over said hitting area to determine a golf ball's distance, direction, and flight path after impact and displaying said information on said display means~~.

16. (Original) The electronic golf swing analyzer system, as recited in Claim 15, wherein said infrared support base and said ultrasonic support base are pivotally connected together along one edge thereby enabling said analyzer to be selectively opened and closed.

17. (Original) The electronic golf swing analyzer system, as recited in Claim 15, further including a stance base connected to said infrared support base upon which a player stands to swing a golf club.

18. (Original) The electronic golf swing analyzer system, as recited in Claim 17, wherein said stance base includes a grid surface.

19. (Original) The electronic golf swing analyzer system as recited in Claim 18, wherein said stance base includes two hinged boxes.

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20. (Original) The electronic golf swing analyzer system, as recited in Claim 15, wherein said software program allows a user to select a specific club, ball, environmental conditions, and the player's profile (right handed or left handed golfer).

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